

Obituary.

**SIR WILLIAM MACEWEN, C.B., M.D., F.R.C.S.,
F.R.S.,**

Regius Professor of Surgery, University of Glasgow; Honorary Surgeon to the King in Scotland; Past President of the British Medical Association.

THE profession has heard with deep regret of the death, on March 22nd after a short illness, of Sir William Macewen, Regius Professor of Surgery in Glasgow. His loss is felt with particular keenness by old Glasgow students and by members of the British Medical Association. He took office as President at the very successful Annual Meeting of the Association in Glasgow in 1922, and had only recently returned from representing the Association at the Australasian Medical Congress in Melbourne.

William Macewen was born at Rothesay in 1848 and graduated at Glasgow University in 1869. He was house-surgeon to Dr. George McLeod, and for a short period after this was superintendent of the City Fever Hospital at Belvidere, where possibly he obtained his first ideas of intubating the larynx as a substitute for tracheotomy. It is quite certain that he had used his gum elastic tubes for this purpose (1880) long before intubation was suggested as a means of treating obstruction.

In 1877, at the age of 29, Macewen became full surgeon at the Glasgow Royal Infirmary, with charge of wards. He remained on the staff until 1892, when he was appointed successor to Sir George McLeod as Regius professor of surgery. This appointment necessitated his severing his connexion with the Royal and taking up work in the wards of the Western Infirmary, so that for forty-seven years Macewen has been in active service on a hospital staff. During the whole of this long period he has worked without ceasing. It has been a continual source of wonder and admiration to all who knew him and a matter of some concern to all his friends, many of whom endeavoured to persuade him to go slower, but one might as well have tried to stop the sun.

It was at the old Glasgow Royal Infirmary in Wards 21, 22, and 29 that Macewen did practically all his work, or at least laid the foundation for work to be completed later on. At some early period in his career he had been appointed casualty surgeon at the Central Police Court, and I have often heard him speak of the valuable experience obtained in the course of this work. Some of it was incorporated in two admirable papers, which he published in the *Glasgow Medical Journal*, on "Wounds in relation to the instruments which produce them" and "The pupil in its semiological aspects." In the latter he drew attention to the state of the pupil in alcoholic coma—a characteristic condition, which has sometimes been called the

Macewen pupil. Moreover, the experience gained there in connexion with wounds of the thoracic wall would seem to have given him the first hint regarding his molecular cohesion theory, especially in connexion with the pleural surfaces.

At an early date his attention was directed to problems connected with bone lesions and the growth of bone. He devised a new operation for the treatment of genu valgum, and his "linear osteotomy" is practically the only operation performed for this condition at the present time. After several preliminary papers on the subject, he published his monograph *Osteotomy* in 1880. In 1886 he published in the *Annals of Surgery* a paper on the radical cure of hernia. The method of treating hernia suggested by Macewen was the first open operation for this condition which was really

a success. It was a radical cure, and although many other methods are employed now, none of them give better results than were obtained by Macewen and his followers. In those early days hernias were hernias; apart from strangulation, patients only came for operation because of the bulk of the swelling when it was down.

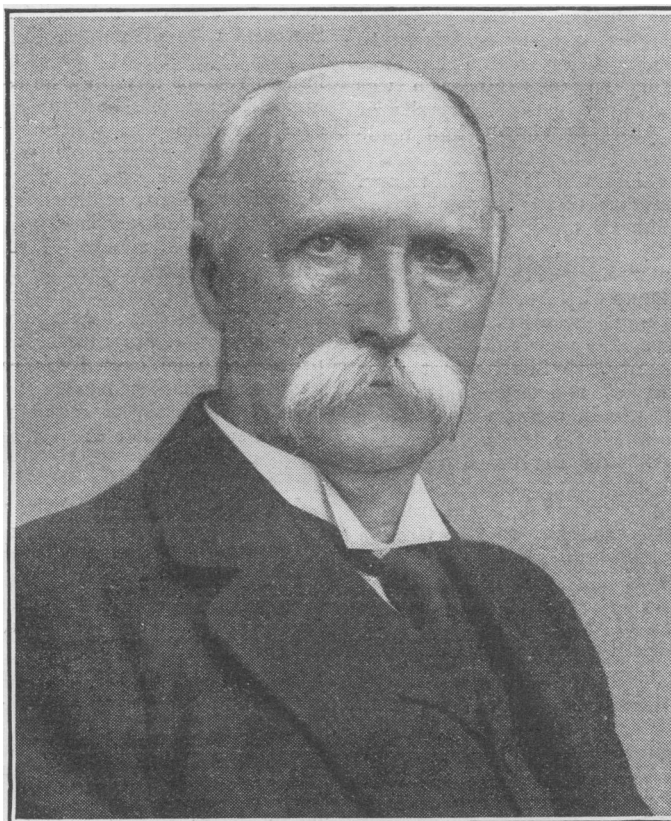
Macewen obtained his results because from the very beginning he was a genuine and whole-hearted believer in antiseptic surgery. For many years he used the spray, and although he had given it up generally, he continued it up to the end of the eighties for all resections of joints—in fact, until he really began to work completely aseptically. He very soon in his career set out to obtain a reliable catgut—not only a sterilized gut, but one which would resist the action of the tissues for such definite periods as might be required. He devoted much time to experiments directed to this object. He published his results in 1881 and he used the same method of preparing catgut up to the end.

Everyone is doing bone grafts nowadays and making new shafts for long bones, but just about

forty years ago Macewen remade a humerus shaft after osteomyelitis by repeated grafts so successfully that for years afterwards the patient acted as his laboratory attendant and is believed to be still alive.

In 1888 the British Medical Association met in Glasgow. Rumour had been busy regarding some remarkable work in cerebral cases that was being carried out in the Glasgow Royal Infirmary, though only a few had any real knowledge of it. Macewen was invited to give an extra address in surgery, and took cerebral surgery as his subject. Although his reception was not too good at the commencement of his address, he held the audience as he unfolded his story, and when he had finished he had made a chapter in surgical history, and his own place in the temple of fame. By general acclamation Macewen that day stepped into the very front rank of surgeons, where he has remained ever since.

The results of his antiseptic and later of his aseptic methods were as nearly perfect as surgical methods can be,



Photograph by]

[T. and R. Annan, Glasgow.

SIR WILLIAM MACEWEN.

Shortly before the Annual Meeting at Glasgow Sir William Macewen was induced to sit to a photographer. Of the two photographs taken one was reproduced on a full plate in the *BRITISH MEDICAL JOURNAL* of July 29th, 1922. It showed Sir William in profile. The other, now reproduced, is less striking perhaps, but shows him as he would stand facing his audience full face.

and yet Macewen was operating in a wretched theatre in a block of the Infirmary which for years had been the fever house. Macewen must have been the first surgeon in Great Britain to adopt the aseptic system whole-heartedly. Certainly for several years before Schimmelbusch demonstrated his methods of sterilizing dressings and instruments by steam Macewen had been boiling his gauze. He was present at Schimmelbusch's demonstration at Berlin at the congress of 1890, and on his return from it all instruments were boiled before operations in his theatre. All his instruments were of steel throughout (he had banished wooden handles), and a steam sterilizer for dressings was installed at the earliest possible moment.

About this period of his career an offer was made to him to become surgeon-in-chief at a large new hospital that was about to be opened abroad, and he was seriously disposed to accept it, but happily better counsel prevailed and Macewen remained in Glasgow to carry on his great work and to enrich British surgery to an extent that few, if any, other men have done. In 1892 Macewen was appointed Regius professor of surgery in the University of Glasgow, which two or three years previously had made him an LL.D.

Down to the time when he left the Royal Infirmary, although he had lectured on surgery in the medical school there, he had not concerned himself much with teaching, but now he threw himself into the work of the new appointment and taught surgery in a manner that probably had not been attempted by anyone before, so that he immediately became one of the most successful and popular teachers in the medical faculty. He reorganized the surgical department of the University. When he first went there this consisted practically of a lecture room and museum and nothing more, but within a few years a large surgical laboratory was built, and here the greater part of Macewen's time was spent. He continued to work especially at osteogenesis, and an account of his observations, experimental work, and conclusions drawn therefrom was published in his well known monographs *The Growth of Bone* and *The Growth and Shedding of Antlers*.

Mention must also be made of his great work on the *Pyogenic Infective Disease of the Brain and Spinal Cord*; in it he described the method of dealing radically with chronic middle-ear disease by the mastoid operation which he had originated many years previously. About the same period *The Atlas of Head Sections* appeared—a work which is invaluable to any surgeon desirous of carrying out operations on the cranial contents. Macewen was a pioneer also in pulmonary surgery. He removed one lung from a man in the early nineties, and the patient was seen by me so recently as four years ago.

From the outbreak of the war Sir William acted as consulting surgeon to the naval forces in Scotland. This involved an enormous amount of additional work, but he went into it with all his old energy and enthusiasm. Now he was in the North and then in the East of Scotland, and all the time while in Glasgow he carried on his teaching at the University and Infirmary, and in addition did a large amount of operative work at the hospital established by the Marquess of Bute at Mount Stewart for the reception of naval wounded men. He was chiefly instrumental in establishing what became known as "The Princess Louise Hospital" for the making and supplying of artificial limbs for soldiers and sailors. The authorities met the proposal at first with opposition and argued that there were no limb makers in the country. In fact, limb makers had to be imported into Great Britain to make limbs for the limbless at Roehampton. With the assistance of Mr. Harold Jarrow limbs were made in some of the pattern shops on the Clyde, which were so good that consent was obtained for carrying out the scheme, and at Erskine House limbs were made by men, who were pattern makers by trade, which were equal to those made elsewhere, and at so moderate a cost to the War Office that charges were reduced all round.

Many honours came to Macewen. He was knighted in 1902 and made a C.B. in 1917. He was appointed surgeon to the King in Scotland. He received the honorary degree of LL.D. from the Universities of Glasgow and Liverpool,

and of honorary D.Sc. from Oxford and Trinity College, Dublin. He was honorary F.R.C.S. England and Ireland, and F.R.F.P.S. Glasgow. He was also a member of many foreign medical societies. He was President of the International Surgical Congress in London, 1923, and of the British Medical Association when it met in Glasgow in 1922. In 1922 he received the freedom of Rothesay.

Last autumn he went by way of America and New Zealand to Australia to represent the parent Association at the Medical Congress held by the Australasian Branches of the British Medical Association in Melbourne. He returned apparently in excellent health, took up work again with all his old zest, even going up to the Infirmary to do emergency operations at night, but an attack of influenza was followed by pneumonia, which terminated fatally.

Macewen illuminated every subject he took up. He was never in a hurry to publish. He concerned himself with fact and with principles. When he made his statement it was final; he had the proof of its correctness and he never had to retract anything he said or wrote. A great worker himself, Macewen had the gift of getting the best out of everyone who was working with him. Of commanding presence and persuasive speech, he was able to inspire all about him with some of his own enthusiasm. Dull, indeed, was the resident, student, or nurse who could not imbibe some of the energy and "go" of the chief who, if he expected much, always led the van by doing more.

Great in stature, great in his outlook, great in his friendship, Macewen stands out as one of the greatest surgeons the world has seen. At the present time surgery is almost or actually at its zenith, and progress in the future is probably to be looked for in the direction of preventive measures and biochemistry; but surgery will ever be an indispensable aid to suffering humanity, and as long as this is so the name of William Macewen will live.

J. H. PRINGLE.

When the members of the medical profession in Glasgow and the West of Scotland resolved to invite the British Medical Association to hold its Annual Meeting in Glasgow there was no hesitation at all in asking Sir William Macewen to accept the office of President, and he threw himself with characteristic energy into the work of preparation. Of his attention to detail and the sacrifice of time he made to ensure the success of the meeting, Dr. George Allan, its Honorary General Secretary, says something below. Sir William Macewen neglected nothing, but, as was to be expected, took particular care that the scientific side should have very full expression; for example, he insisted on the establishment of a Section of Microbiology, to include bacteriology, but to deal also with such subjects as the microbiology of plant and animal diseases, the mutation of species, and parasitology. His address as President dealt mainly with brain surgery; in it he reviewed his life-work on a subject in which he was one of the chief pioneers. For an estimate of the value of this work we may refer readers to the contributions we print below from Sir Charles Ballance and Mr. Percy Sargent, both of whom speak with authority. But we may recall that in commenting on the address at the time we observed that it had been our President's lot to have worked courageously, long, and untiringly, and that he was fortunate to see such fruition before eyes which, in the early days, must often have been baffled and dejected. As the President of the Association who succeeded him at Portsmouth observes, Sir William Macewen did not lose his interest in the British Medical Association with the termination of the Glasgow meeting; he attended regularly the meetings of Council, and last summer consented to accept the invitation of the Australasian Branches, and attended the great congress of those Branches in Melbourne last November as the representative of the Council and Home Branches. Of the cordial welcome he received in Australia, of his visit to Sydney, of the address he gave at the opening of the new anatomy department in the University of Melbourne, and of the share he took in the congress generally, we gave a full account in our issues of January 5th and February 23rd. He attended the meeting of the Council of the Association on February 13th, and gave a short address in which he spoke in the warmest terms of the cordiality of the welcome

he received in Australia. He then appeared to be in his usual health, alert and vigorous in mind and body. His death removes a great figure, and members of the British Medical Association will always be glad to remember that they gave to him the highest honour at their disposal by electing him to be their President. To those who came into close contact with him, perhaps for the first time in connexion with the Annual Meeting, his loss will be a deep personal grief, for, though he never left his opinion in doubt, he always gave good reasons, and his courtesy was unflinching.

A PERSONAL NOTE

BY

JOHN PATRICK, Surgeon, Glasgow Royal Infirmary.

THE passing of a man of genius must always be an event to thrill the world. When the news of the death of Sir William Macewen ran swiftly about Glasgow last Sunday, there was only one thought, the thought of universal and irreparable loss. To many the loss is an intimate personal one. A great statesman binds to himself intermittently groups of secretaries and adherents and political friends; a great artist has his friends and admirers and worshippers; a great ecclesiastic may have countless devoted curates and assistants: but the relationship of all these to each other can never have the curious friendly intimacy of a great surgeon and his house-surgeons who pour through the years of chiefship in a steady stream. No man is a hero to his valet, but any house-surgeon would regard himself as infinitely disloyal if he did not hold his chief high before him as his hero, worthy of all worship. Macewen was a visiting surgeon for forty-seven years in the Royal and Western Infirmarys of Glasgow, and it is the house-surgeons of these many years who feel his death most keenly.

In the house-surgeon days one was too near to appreciate the real genius of the man. It is only in after years when one has come to fill the same position—*longo intervallo*—and has grown out of the infallibility of youth, that the greatness of his surgical genius is fully appreciated. It has been said that genius is an infinite capacity for taking pains: an imperfect definition containing only one, and that possibly a minor, attribute of genius. To Macewen the capacity for taking pains was a lifelong quality, but of much greater importance was his capacity for knowing in what direction to take pains, along what lines of scientific investigation to run, and the objective to be sought after.

His genius acted with great rapidity. Appointed full surgeon to the Royal Infirmary of Glasgow in 1877, at the age of 29, within three years he published his work on osteotomy. Those of us who can throw our minds backwards beyond the days of x rays will recognize the magnitude of his discoveries not only of the external configuration of the bones, but also of the nature of the aberrant osseous growth in rickets. And those who have even faint knowledge of steel manufacture will recognize the infinite pains he took to make certain of the proper temper and toughness of the steel for osteotomes and chisels, and the innumerable ox bones he cut in practising the operation before performing it on a patient. In eight years more—1888—he astonished the surgical world with his address to the British Medical Association on cerebral abscess and sinus thrombosis and the other complications of otitis media—a subject about which little or nothing was known till his paper, embracing many cases, was presented. And so it continued throughout his life. It was characteristic of his work that he published nothing until he was able to present his completed record.

Within recent years he published his works on *Growth of Bone* and on the *Growth and Shedding of the Antlers in Deer*, books which bear signs of infinite painstaking research, enormous individual work, and careful accumulation of facts continued throughout many years.

In reading any of Macewen's books one has a curious feeling that nothing more on the subject remains to be said—that apparently finality has been reached. And events have proved that this is true. His work on osteotomy is regarded as the last word on the subject. There has been no advance in the work on pyogenic disease of the brain

and spinal cord since his classic was published. The descriptions, anatomical and pathological, of temporosphenoidal abscess and sinus thrombosis, and the various complications arising in connexion with middle-ear disease, have not altered. All that has changed in this department of work is some alteration in technique of more or less superficial sort. In this connexion this quotation from Osler's *Medicine* is appropriate: "A most important, one might almost say essential, factor in the successful treatment of intracranial suppuration is an intelligent knowledge on the part of the surgeon of the work and works of William Macewen." Similarly with his work on hernia. It may be true that the Macewen operation for hernia is not now performed by many surgeons, but it was he who pointed the way to the proper appreciation of the essential anatomical requirements in any operation for hernia.

Macewen was essentially an individualist. All his work was done by his own hands. The modern cry for team work made no appeal to him. His work was purely and entirely his own. His classic *Atlas of Head Sections* contains a great series of the most beautiful photographs showing the anatomical structures accurately figured. Every section was cut by himself, and he spent many days taking numberless photographs before the final selections were made for publication.

And what of the personality of this man of genius? Overtopping his fellows in height, of commanding presence, with clean chiselled features, and the most penetrating blue-grey deep-set eyes in the world, his was a notable figure. It is an infinite regret that no painting of Macewen is in existence, though it must be said that a committee had only in the last few weeks made arrangements for obtaining a portrait by some distinguished artist. A curious foible, it may be called, was an intense dislike to be photographed. He was photographed in a group of nurses and assistants in the Royal Infirmary when he left it in 1892, and no other photograph was taken in this country till immediately before the meetings of the British Medical Association in 1922, except, perhaps, in some groups taken at Erskine with Earl Haig; in these groups he appears full-bearded as we had all known him for so many years.

His cosmos possessed a large share of ego, and, driven on by the passion to unfold the secrets of nature, he pursued his course like some inexorable machine. Let us admit that he could not fulfil the apostolic injunction to "suffer fools gladly." Life was too big and too serious, with so much to be done in it, for him to find any place for fools and shirkers, for insincerities and futilities. While he worked himself, he expected others, his assistants, house-surgeons, and nurses, to work hard too. In the Scottish hospitals the surgeon in charge of wards invariably visits and works in the wards for three or four hours each day. Macewen spent many hours more in writing, in photography, in specimen making, in observing cases, and in emergency work. The work of the wards was much more to him than private practice, and it claimed the greater part of his energies. With all his steady burning zeal for scientific work, he had room for other interests. In his younger days as surgeon to the Central Police Station he proved himself an expert in the use of the singlestick; later his love for yachting, probably an hereditary taste, was manifest; and later still he loved to think of himself as a farmer in his native Isle of Bute, not of the bucolic but of the true nature-loving, inquiring, experimental type.

As a man of affairs Macewen had a far-seeing and quick mind. In the committee which organized the Princess Louise Scottish Hospital for Limbless Sailors and Soldiers—a notable example of his power of carrying out great principles by practical means—and in the multifarious committees of the Annual Meeting of the British Medical Association in 1922, people who did not know the real Macewen were astonished at his firm grasp and management of business and his adroit and courteous handling of difficult people and delicate situations.

The spirit of inquiry led Macewen to make frequent journeys to other schools of surgery, especially on the continent of Europe. He became as well known and appreciated (perhaps, let it be confessed, a little more so) in the schools of France and Germany, Russia and Italy, as

in the schools of his own country. Yet the personal debt which his own school, and the surgeons in Glasgow at the present day, owe to him can never be adequately measured. His multitudes of pupils found in him an inspiring teacher from whom they learned, not to cram for examinations, but to observe, to learn surgery, and to recognize its basis in pathology. It was not for him to hammer into men the hard array of facts of surgical textbooks: as he used to say, "You cannot expect a Derby winner to draw a hansom-cab." There were those who misunderstood him—men who said that he was forgetful of loyal service, pontifical in manner and speech, unappreciative of other men's distinguished work, egotistical. No great man is devoid of detractors: it is not for him to explain himself. One speaks and writes of Macewen as one knew him—a kindly gentleman, a good friend, a generous host, a racy, amusing talker. He was possessed of a grim, if not very subtle, humour, and an easy appreciation of the funny side of a situation. In the Royal Infirmary days the pathologist was a most lovable and able man whose temper was easily roused, showing most readily in hyperactivity of the arrectores pilorum. Nothing delighted Macewen more than to indulge in a little baiting of the pathologist to let his house-surgeons see the irascible one's hair stand on end. A wealthy London merchant once consulted him concerning a vexatious tumour which worried him. Macewen's recommendation was complete extirpation of the growth. "But," objected the patient, "Sir So-and-so in London thought operation was not necessary and told me to have it painted." "Ah, yes! but—we—would—have it removed first."

Macewen's interest in the nursing profession dates back to the earlier days in the Royal Infirmary. There, with Mrs. Strong, then matron, a system of training of nurses was inaugurated and carried out for many years. The essential of this system was a course of preliminary education before starting work in the wards, with periodic examinations thereafter. That successful surgical work is dependent in great measure on good nursing was always one of Macewen's maxims.

One hesitates a little to shed light, even a dim one, on the home life, but it should be known that Sir William Macewen's family life was particularly happy. When entertained to dinner on the occasion of his knighthood in 1902, reference was made to this subject, and in his reply he said that he had drunk deep of the cup of domestic happiness. His death is the first break in the family, if the death of a son-in-law in the war be excepted. The part that Lady Macewen has played in the life of our great chief has been that of guarding the flame, the loving watcher of the home, and the proud but quiet sharer of the honours showered upon her partner in life, the greatest surgical genius of his generation.

THE PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

Mr. CHARLES P. CHILDE, B.A., F.R.C.S., writes:

Though I can speak with very little personal knowledge of the late Sir William Macewen, yet it seems fitting that, having so recently succeeded to the high office filled by him with so much distinction, and vacated at Portsmouth last July, I should testify to what it needs no personal knowledge to endorse—the grievous loss the profession of surgery, not only in this country but throughout the civilized world, has sustained by his untimely and unexpected death. I remember well the sensation his remarkable address on surgery of the brain, read before the British Medical Association at Glasgow in 1888, created. He was then a pioneer. He supplemented this, and gave us his further experiences in his masterly presidential address on the same subject less than two years ago; and no one who listened to that address and witnessed the alertness and energy of the man, or who saw him last summer at Portsmouth, apparently in the full strength of his mind and body, can easily imagine that vigorous personality at rest. To the Association, of which so lately he was President, only yesterday a familiar figure at its Council meetings, so recently representing it in one of our overseas dominions, his loss will feel very near. In so far as I may be permitted to speak in the name of the Association and to voice its sentiments, I would say that its members

one and all, whether they knew him personally or not, must feel to-day that they have lost one of its outstanding figures, one of its greatest ornaments, and one of whom the whole profession was justly proud.

THE PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

We are indebted to Sir JOHN BLAND-SUTTON for the following tribute to Sir William Macewen:

A splendid figure passes from British surgery by the death of Sir William Macewen. I met him first at the Royal Medico-Chirurgical Society, London, on the memorable evening, May 12th, 1885, when Hughes Bennett and Godlee gave an account of the diagnosis, localization, and removal of a tumour (glioma) from the cortex of the cerebrum of a man aged 25. This operation really initiated brain surgery as it is accepted to-day. Macewen was invited to the meeting, and contributed to the discussion some valuable observations relating to the operative treatment of intracranial abscess. Horsley was present and took part in the discussion. Some of Macewen's most valuable work was the excellent atlas of head sections he published, demonstrating especially the routes and effects of pyogenic infection of the meninges, abscess of the brain, and thrombosis of the cerebral sinuses, and the methods of dealing with them surgically. In conversation with Sir William Macewen I have been impressed with his deep interest in the scientific as well as the practical aspects of surgery. In after-dinner talks with him I have acquired interesting and reliable information regarding natural history. I found him as much at home in discussing with me the manner in which the woodcock transfers her chicks from danger, as in the transfer of septic clots from the lateral sinus to the pulmonary vessels. His surgical interest in a rickety tibia was not eclipsed by his knowledge of the mode of growth of a stag's antlers, and he drove his opinions home, not with the insinuation of a crafty advocate, but with all the dogmatic force of a political partisan. Exactly a year ago I spent an hour with him in the wards of the infirmary at Glasgow. This surgeon, aged 74, was as keen in showing me a radical cure of hernia, and a man recovering from the removal of a subtentorial tumour of the brain, as he was in uttering invectives against the authorities of the infirmary. Sir William Macewen is a striking example that extreme specialization in surgery can be carried out by a professor engaged in general surgical practice, who can both teach students the principles of the art and science of surgery and engage in research. It is this love of work that enables such men to do useful practical work and carry out original research after the age of 60. The Council of the Royal College of Surgeons of England showed its appreciation of Sir William Macewen's ability and zeal by electing him an honorary Fellow on the occasion of the College centenary, 1900. He was received with warm approbation by surgeons from the British Isles and overseas—with very warm approbation on that historic occasion.

THE PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

Sir W. I. DE C. WHEELER sends the following appreciation:

The death of Sir William Macewen leaves a vacancy in the community of British surgeons and British scientists which will long remain unfilled. It was my privilege to know him intimately, and to have experienced the force and sincerity of his character in connexion with private matters and in public life. In whatever circle he moved he was an outstanding figure, strong and attractive, sometimes imperious and dominating, but yet with an open and just mind and a personality which was the admiration of all.

During the war I was a member of committees and conferences in which Macewen took a leading part. It was striking how a hush would fall on an assembly when this tall commanding figure rose to speak. He addressed a meeting with quiet dignity, but there was a force and insistence in what he said which baffled opposition, and brought his views to prevail.

His writings breathed infinite accuracy, perseverance, and

truth, and have done much to establish the high reputation of British surgery in foreign lands. In conversation he lacked some of the frills and flashes of the genius which he was, but by personal magnetism he was able to get things done and to stimulate the workers by whom he was surrounded. Outstanding ability, indefatigable work, and immense effort brought their rewards. It is to the credit of the scientific institutions of these countries that they recognized him at his true value, and that during his lifetime he had the pride and satisfaction of knowing that his work was appreciated. He became a Fellow of the Royal Society, and was honoured by the Universities of Glasgow and Liverpool. The Colleges of Surgeons of England and Ireland gave him the Honorary Fellowship, and the Universities of Oxford and Dublin the degree of Doctor of Science. These are but a few of his academic distinctions, for there came a time when no honours list in the realm of surgery was complete unless the name of Macewen was included. Quite recently it was suggested by professional brethren that he should be paid a unique compliment, but the deliberations of the committee were cut short by the announcement of his death.

He has bequeathed to the profession the priceless gifts which he collected while advancing as a pioneer and a discoverer, and many generations to come will appreciate and be guided by his contributions to the surgery of the brain, the surgery of hernia and aneurysm, and his deductions in connexion with the growth of bone and the pathology of pyogenic disease.

MACEWEN AS A SURGEON.

Sir CHARLES BALLANCE, K.C.M.G., Consulting Surgeon to St. Thomas's Hospital, London, has written for us the following tribute to Sir William Macewen's position as a surgeon:

The death of Sir William Macewen has removed from the stage of surgery the most prominent and perhaps the most gifted surgeon of Britain. Hippocrates lived in a great age, and had for contemporaries many famous men. This is true also of Macewen, for during his lifetime many great and distinguished men lived and worked. A few names may be mentioned: Virchow, Pasteur, Helmholtz, Kelvin, Lister, Michael Foster, Hughlings Jackson, Victor Horsley, and David Ferrier; and there were many others. Macewen lived through the most glorious period of British surgery. The increase in knowledge of the physiology, pathology, and surgery of the brain, the recognition of the microbic origin of disease, the use of chemical pathology and of the experimental method of research, the demonstration of the truth of the localization of function in the brain, the discovery of anaesthesia, and the proof given by von Graefe that blindness occurring in cerebral disease was not, like the palsy, a direct effect of the lesion but the secondary result of optic neuritis—were all important factors in progress. These great discoveries were recognized early by Macewen as essential to the diagnosis and treatment of diseases of the brain which are amenable to surgical treatment. Macewen entered on his career at the epoch of "limited surgery"—the surgery of erysipelas and of purulent infection; that surgery from which safety was banished, and which poisoned with heavy cares the mind of the operator; that surgery, in fine, which saw itself reduced to laying down the knife as mortal complications fell with impartial fatality on all the operation cases in a ward. Macewen hailed with welcome the new doctrine of Lister, and became a pioneer in the conquests which have since been realized in all departments of surgical activity. In 1887, in a splendid address delivered before the British Medical Association, he said: "The full force and significance of the experiments of Fritsch and Hitzig in 1870 were not recognized until Ferrier's observations on the brains of animals, undertaken to put to experimental proof the views entertained by Hughlings Jackson, were published in 1873. Another link in the unity of the plan of creation was manifest, as even in the higher and more complex brain of man parts existed whose functions found homologous expression in that of the lower animals." It was at this period and in the preceding two or three years that the question of intracranial operations for the relief

of cerebral disease was agitating the minds of surgeons. Ferrier wrote in 1883 "that up to that time cerebral localization had been absorbed like latent heat by medical science itself, as distinct from medical and surgical practice; but that the unfailing safety of experiments upon animals made it clear that similar results would soon be achieved on man himself." It must be remembered that not only did human surgery fail, but also that the method of experiment was fatally handicapped, and that "unfailing safety" was not attained till the great discoveries and principles of Lister became widely known and accepted. Indeed, it is true to say that the genius of Lister well and truly laid the foundations of Macewen's great success in the surgery of the nervous system.

In talking with other surgeons, especially with juniors, Sir William Macewen's thoughtful face, genial voice, and winning smile were very attractive. In addressing an audience his commanding presence was a considerable asset, and his voice had that clear bell tone to which it is so pleasant to listen. Sir William was also a brilliant and original operator. But none of these things were the primal cause of the attraction which he exercised upon the surgeons of the world. It was rather this: like another great surgeon of Glasgow—namely, Joseph Lister—William Macewen was for ever endeavouring to unravel some problem of surgery or surgical pathology. He lived for the science of surgery. His life was devoted to research. In visiting Macewen's clinic the writer, like many others, has come away refreshed with some new thought, some new idea, or some suggestion which was to bear fruit in some future year. Macewen's life teaches that there is no last finish in the path of surgical progress. This is the legacy which he left behind. We who remain are pilgrims of surgery. Let us follow in Macewen's footsteps.

BRAIN SURGERY.

Mr. PERCY SARGENT, C.M.G., Surgeon to the National Hospital for the Paralysed and Epileptic, Queen Square, and to St. Thomas's Hospital, has responded to our request by sending the following note:

The name of William Macewen will live in history as one of the pioneers of cerebral surgery. He has indeed been called the father of brain surgery, for his early work antedated by several years that of Victor Horsley. In an obscure corner of the *BRITISH MEDICAL JOURNAL* of December 27th, 1879, it is recorded that Macewen showed before the Glasgow Pathological and Clinical Society two patients upon whom he had successfully operated—in the one case for hemiplegia due to a subdural haemorrhage, and in the other for a tumour in the left frontal region. This second case is fully recorded in the *Glasgow Medical Journal* of September, 1879. It concerned a girl, 14 years of age, from whom a supraorbital periosteal tumour had been removed twelve months previously. The tumour recurred, and convulsions appeared which involved the right face and limbs. Macewen trephined in the left frontal region, and found the bone to be thick and soft, whilst beneath it lay a "soft flattened gummatous tumour" of the dura mater, similar to the tumour lying on the outer surface of the bone. The tumour was removed. No bad symptoms followed the operation and the paralysis disappeared. It is almost certain that this tumour would now be recognized as a meningeal endothelioma.

It is, however, more particularly with abscess of the brain that Macewen's name is associated. In 1876 he made a diagnosis of abscess in the left frontal lobe of a boy 11 years of age, but was unable to obtain consent for the operation which he wished to perform. A *post-mortem* examination showed the diagnosis to have been correct. Had the operation been permitted it would have been one of the first practical results of the new knowledge of cerebral localization which in this country is associated with the name of David Ferrier, as well as a tribute to Macewen's faith in the new Listerian principles of wound treatment which were then beginning to enlarge the scope of surgery.

Macewen's monograph entitled *Pyogenic Infective Diseases of the Brain and Spinal Cord*, published in 1893, will live amongst the classics of surgical literature. Based upon a personal experience even then extending over ten years, the

wealth of anatomical, clinical, and pathological observations which it contains, together with the clear exposition of views then mostly new, place it amongst the masterpieces of pioneer work.

Fortunately for surgery, Macewen, like Horsley, was no specialist in the restricted meaning of the word. A master of surgery in its truest sense, he brought to bear not only upon the surgery of the brain, but upon that of the bones, the chest, and other regions, that wide knowledge of general surgical principles which the modern specialist so often lacks.

THE GLASGOW MEETING.

Dr. GEORGE A. ALLAN, Honorary Local General Secretary of the Annual Meeting of the British Medical Association in Glasgow in 1922, writes:

Macewen the surgeon, through his work, will pass into medical history as an open book which all may read. Macewen the teacher will long be remembered with veneration by the thousands of students who, in Glasgow, have sat at his feet.

Macewen the man is less well known and has often been misunderstood. Few probably knew him thoroughly, and the writer does not pretend to belong to that privileged group; but the opportunity afforded by the Annual Meeting of the Association in Glasgow in 1922 of working in close association with him and of sharing his confidence in many matters, will always stand out as one of the brightest recollections and greatest privileges of that year. He was so concerned for the success of the meeting that he interested himself in the minutest details, but he had an eye that looked always to the ultimate, rather than to the immediate, result of his decisions, and events usually proved the wisdom of his views. To those who shared his aims he showed the utmost consideration and courtesy, and was always willing to discuss his plans or their suggestions, though, as someone quoted at the time of the meeting, "he was not one who suffered fools gladly." In dealing with many difficult situations he exhibited an amount of tact that astonished those who thought they knew him best, and he was ever anxious to avoid giving offence, or to do anything which might hurt susceptible feelings. The smaller the committee the better one got to know him, and with increasing knowledge came increasing admiration of his wisdom and of his thoughtful regard for others.

In contrast to his more official duties in connexion with the British Medical Association, three memory pictures stand out in definite relief: One at the old castle in Rothesay, when receiving the freedom of his native burgh—Sir William, with Lady Macewen, accompanied by their three sons and three daughters, and two grandchildren; an unbroken family group. One at Garrochty, his country seat in Bute—Macewen the farmer, as he liked to call himself, interested in and discoursing on the mysteries of nature on land and sea. One at the Isle of Wight—Sir William, after his strenuous duties as President of the International Congress of Surgery, having crossed the Solent to enjoy the sea breezes and sunshine, and escape for a little from the turmoil of meetings and receptions at Portsmouth, but concerned that he had time, before the steamer's return, to send souvenirs to his grandchildren.

Though very imperfectly drawn, these sketches may shed a little light on a man who was at once very great and very human.

AUSTRALIA.

Dr. W. T. HAYWARD, C.M.G., of Adelaide, late Chairman of the Federal Committee of the British Medical Association in Australia, who is now in this country, sends us the following note:

As an Australian who had the privilege of seeing a great deal of the late Sir William Macewen during his recent visit to Australia, I should like to express my great grief, which I am sure is shared by every member of the medical profession in all the States, that he has passed hence. The British Medical Association in Australia was highly honoured when it learned that Sir William was to represent the parent Association at the recent congress. The anticipation, the advantage, and the pleasure that we should experience in having so distinguished a man with us was more than realized. We were amazed at his erudition and charmed with his personality. His energy was wonderful.

When bidding him farewell at Adelaide on an intensely hot day, and knowing the arduous journey before him, I could not help feeling anxious as to whether the duties he had undertaken, and so thoroughly carried out, might not have been too much for a man of his age.

A CONTEMPORARY'S REMINISCENCES.

J. M. writes:

Macewen's great name had some of the influence of romance on the medical students of the Glasgow school, and even on the profession in general in the West of Scotland. The current stories of what might be called either his strength of character or his obstinacy, according to the particular point of view of the narrator, were no doubt largely apocryphal, but none the less impressive. Two or three of them may be briefly mentioned.

When the Johns Hopkins school was being established in America, those in control of it seem to have searched the world for young men of outstanding ability in research or teaching capacity or technical skill. Macewen was offered appointment, but declined. It was pointed out to him that not merely a salary was in question, but that he would cross the Atlantic as having been chosen for the new post from amongst the rising surgeons of the Old World, and that a great practice awaited him. He still declined. Then, his habit of operating in a corridor of the Royal Infirmary in preference to the regular theatre being noted, he was told that the surgical wards at Johns Hopkins had not yet been built, and if he only would come they would be erected to his own design. But he declined. Next it was thought that perhaps assistants and nurses might be the obstacle, and he was assured that up to any reasonable number he might bring them with him. But he declined. Finally it was submitted that he must anyhow be in need of a long holiday, and if he would come over for six months to Baltimore, and incidentally advise them about the establishment of the new school, he would be suitably remunerated. But once more he refused to leave Glasgow, and that was the end of the project.

Another story which went the rounds related to his appointment as professor of surgery in the University, he being at that time in the extramural school and surgeon to the Royal Infirmary. The University school was, of course, associated with the Western Infirmary, and gossip was to the effect that the managers of that institution were determined that when the new professor applied for wards there he would not get his own way in everything as had been the habit at the Royal, so the Western managers went home from their meeting on the subject firm in the intention to boss their own show. At their next meeting they learned with surprise that no application had yet been received from Macewen for the late professor's wards. Doubtless this was an oversight, but at still another meeting the expected request had not come to hand; and as the opening of the session was approaching it was thought right that someone should mention to Macewen the mistake that he was making. Then came the astonishing report that Macewen, thus approached, had replied that he saw no occasion to apply for wards. True, he was now to be professor of systematic surgery at Gilmorehill, but that need involve no change of hospital. He was very comfortable at the Royal, and those who wished to attend his clinic and be present at his operations could come to the Royal. The result of this undreamt-of attitude was, as the story went, that the Western managers had practically to ask him to accept, and had to give him pretty much the same free hand as he had had at the Royal Infirmary. Later on, however, being once fairly settled in the Western Infirmary, the managers tried another fall with him. This was, if the writer recalls aright, in connexion with a proposal to appoint another surgeon at the Western, and to give him beds partly by taking them from the surgeons already in charge. When that proposition was put before Macewen he flatly declined to agree, and on it being pointed out to him that the managers could compel the arrangement, he replied that he had been offered an appointment in the medical school connected with one of the great hospitals of London, and that he would accept the offer if his ward accommodation in Glasgow was to be cut down. And so once more he conquered, and that time finally.

Almost certainly these tales as circulated at the time, and now imperfectly recalled, were by no means quite as here set down. But however far astray they may be, they had their influence on the students of the University, increasing their regard for and their pride in their distinguished teacher. He was a great figure in the lecture room—tall, handsome, dignified, a lucid teacher who spoke with all the authority of a world-wide reputation, as a master in the exposition and practice of the science and art of surgery. And now, alas! he is no more, but the work he did is his everlasting monument.